



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID. PO24839

Purchase Order Date 7/2/2014

PO Print Date 7/2/2014

Page Number 1 of 2

Order From :

VC-MET002

METAUX SOLUTIONS
2625 BOUL JACQUES-CARTIER EST
LONGUEUIL, QC J4N 1L7
CA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAXED

Contact Name

Vendor Phone 800 558 8858

Ship To Contact

Ship To Phone

Ship Via: TST Overland

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	M304TS0.750W.049	304 SQ Tube .75x.75x.049W	7/8/2014		600.00	\$3.80	\$2,280.00
			Yes 7/8/2014		f		
	MATERIA: AISI 304/316 STAINLESS STEEL SQUARE TUBING AS PER ASTM A554 MILL FINISH OR AS PER ASTM A269 MILL FINISH						
						Line Total:	\$2,280.00
2	71401-45	PROCUREMENT QUALITY CLAUSES	7/8/2014		1.00	\$0.00	\$0.00
			No 7/8/2014				
	Procurement Quality Clauses A005 right of entry A012 chemical and physical test report A016 personnel qualification A017 raw material identification (as applicable) A026 certification of material conformance A041 quality management system A042 dart notification by supplier A043 retension of quality documents						

Note:

7/2/2014

Shipping Order

04/07/2014

METALUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7
Tel. : 450 641-3330

Order : 97985
Reference : 24839
Ship : PICK UP / PICK UP

Customer : 6323336

Ship To

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Deliver	B/O Qty
SSQT34340494	304 SQ TUBE .750 X .049 WALL 30 x 20'	600	<u>600</u>	<u>0</u>

ht # 952790

DAS

27

9-89

4/1/18

svp ship jeudi

Ry/2/18

Shipping : _____
Package No : _____

Ref. : _____

Merchandise Received: _____

Purchase Order Receipt Listing

Page 1 of 1

Tuesday, July 08, 2014 1:14:43 PM

All amounts are calculated in domestic currency.

All Vendors PO ID PO24839 Receipt Dates from 7/8/2014 to 7/8/2014 All Line Item Types

All Item ID/GL/WOs All Rec. Employees All Currencies

Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID\Vendor Name		VC-MET002 Metaux Solutions									
PO24839	1		M304TS0.750W.049 f		7/8/2014	7/8/2014	600.0000	\$3.56	0.0000	0	\$2,136.82
CAD	No		304 SQ Tube f .75x.75x.049W M129727		600.0000	DESJ02		\$2,136.82	0.0000	0	
	2		71401-45		7/8/2014	7/8/2014	1.0000	\$0.00	0.0000	0	\$0.00
	No		PROCUREMENT QUALITY CLAUSES M129727		1.0000	DESJ02		\$0.00	0.0000	0	
											</

PHOENIX TUBE COMPANY, INC.
Manufacturer of Stainless Ornamental and Structural Tubing
CERTIFICATION OF TEST

Sold To:

Ship To:

ST

CUSTOMER ORDER#: C91672

CUST REF NBR:

DATE SHIPPED: 01/24/14

SIZE: 3/4SQ X 18GA AW

SOURCE: USA D

VENDOR: ALS

CAN

Phone#

Ext:

ORDER#: 326450

QTY SHIPPED: 1040.0

GRADE: 304L

WELD: HF

HEAT#: 952790

TEST REPORT#: TR011436

Report Date: 11/18/13

Specification:

ASTM A554-13

T304L/304 DUAL CERTIFIED

NO WELD REPAIR

EN 10204 2.2

ASTM-A 240 LATEST REVISION

RAW MATERIAL SPEC.

NACE MR0175/01

ASTM A554 2003 SUPERSEDED

MFG USING

ANNEALED AND PICKLED

PLATE, SHEET OR STRIP

MATERIAL IS FULL SOLUTION

ANNEALED, AND SHOWS NO

CONTINUOUS CARBIDE

PRECIPITATION

MIN SOLUTION ANNEAL TEMP

1900F WATER QUENCHED

DFARS 252.225 7008

COMPLIANT

MERCURY IS NOT USED BY US AS AN ALLOYING MATERIAL NOR IS METALLIC MERCURY HANDLED IN THE VICINITY OF OUR PROCESSING LINES. WE ARE NOT PRESENTLY AWARE OF ANY MERCURY CONTAMINATION.

Chemical Analysis

C	MN	P	S	SI	CR	NI	MO	CU	CO	N2	TI
.018	1.61	.035	.009	.43	18.23	8.10	.41	.48	0	.06	0

Physical Analysis

Hardness	YIELD		TENSILE		OTHER	
	PSI	MPA	PSI	MPA	Percent EL	Percent RA
RB 86	44400	0	92000	0	59	0

THE CHEMICAL ANALYSES ARE CORRECT AS CONTAINED IN OUR CORPORATE RECORDS.
PHYSICAL PROPERTIES ARE DETERMINED WHILE MATERIAL IS IN STRIP FORM.

Melted & Manufactured In the USA FAR BAA complies, DFARS BAA complies, FAR TAA complies

CERTIFIED BY Quality Control Dept.

Jane Lerao

1185 WIN DR, BETHLEHEM, PA., 18017 - (610) 865-5337

FAX NUMBER: 610-865-4073

163642

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
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Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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PHOENIX TUBE COMPANY, INC.
 Manufacturer of Stainless Ornamental and Structural Tubing
CERTIFICATION OF TEST

Sold To:

Ship To:

ST

CUSTOMER ORDER#: C91672

CUST REF NBR:

DATE SHIPPED: 01/24/14

SIZE: 3/4SQ X 18GA AW

SOURCE: USA D

VENDOR: ALS

Specification:

CAN

Phone#

Ext:

ORDER#: 326450

QTY SHIPPED: 1040.0

GRADE: 304L

WELD: HF

HEAT#: 952790

TEST REPORT#: TR011436

Report Date: 11/18/13

ASTM A554-13	T304L/304 DUAL CERTIFIED	NO WELD REPAIR	EN 10204 2.2
ASTM-A 240 LATEST REVISION	RAW MATERIAL SPEC.		NACE MR0175/01
ASTM A554 2003 SUPERSEDED	MFG USING	ANNEALED AND PICKLED	PLATE, SHEET OR STRIP
MATERIAL IS FULL SOLUTION	ANNEALED, AND SHOWS NO	CONTINUOUS CARBIDE	PRECIPITATION
MIN SOLUTION ANNEAL TEMP	1900F WATER QUENCHED	DFARS 252.225.7008	COMPLIANT

DAS
12/27/13
M/18

MERCURY IS NOT USED BY US AS AN ALLOYING MATERIAL NOR IS METALLIC MERCURY HANDLED IN THE VICINITY OF OUR PROCESSING LINES. WE ARE NOT PRESENTLY AWARE OF ANY MERCURY CONTAMINATION.

Chemical Analysis

C	MN	P	S	SI	CR	NI	MO	CU	CO	N2	TI
.018	1.61	.035	.009	.43	18.23	8.10	.41	.48	0	.06	0

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	YIELD		TENSILE		OTHER	
Hardness	PSI	MPA	PSI	MPA	Percent EL	Percent RA
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Melted & Manufactured In the USA FAR BAA complies, DFARS BAA complies, FAR TAA complies

CERTIFIED BY Quality Control Dept.

San Lorenzo

1185 WIN DR, BETHLEHEM, PA., 18017 - (610) 865-5337
 FAX NUMBER: 610-865-4073

163642

Receiving Report

Date: 14/7/8 Batch No: M/29 727

Supplier: METAL SOLUTIONS Dart P/O: 24835

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☐ No ☒
 Receipt: Cash ☐ Cr ☒
 New Supplier Yes ☐ No ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☐ No ☒
 Shipment Complete: Yes ☒ No ☐ N/A ☐
 QC18 Inspection ☒ N/A ☐
 Work Order ☐ N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number

Initials of Receiver

QC12

Production/Admin:

Date: 14/7/8
 Received/Costing: [Signature]
 Initial: [Signature]

Location

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304T50.750 W. 049

PO / BATCH NO.: 24839

DATE: July 8 - 2014

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 30
 QUANTITY INSPECTED: 30
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.750 x .019
 THICKNESS RECEIVED: 0.755 x .054
 SHEET SIZE ORDERED: 600 feet
 SHEET SIZE RECEIVED: 600 feet

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL	Y	N	
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT MATERIAL	Y	N	
CORRECT REF # TO LINK CERT	Y	N	HT # 952190
CORRECT MATERIAL IDENTIFICATION	Y	N	ASTM-A-240
CORRECT M# ON THE MATERIAL	Y	N	M129727
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>27 p-89</u> DATE: <u>7/7/14</u>	SIGNED OFF BY: _____ DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

INSTRUCTIONS FOR INSPECTING BAR, TUBING, ROUND, & SHEET STOCK

- 1- VERIFY STOCK TO DART PURCHASE ORDER
- 2- MEASURE ALL DIMENSIONS FOR EACH PURCHASED STOCK
 - a. WIDTH, THICKNESS, DIAMETER, WALL THICKNESS & LENGTH
- 3- VERIFY CONDITION OF MATERIAL i.e. DAMAGED, CORRODED, etc.
- 4- VERIFY THAT SUPPLIER HAS A NUMBER (HEAT #) ON ITS RECEIVING REPORT TO LINK TO MATERIAL CERTS
- 5- VERIFY MATERIAL CERTS ARE CORRECT TO THE DART PO INSTRUCTIONS
- 6- REMOVE / CUT A PIECE OF MATERIAL FOR SAMPLE HARDNESS TESTING

INSTRUCTIONS FOR INSPECTING SKIDTUBE & STEP EXTRUSION

- 1- VERIFY TO DART SUPPLIED DRAWING
- 2- SAMPLE INSPECT MATERIAL IN BUNDLE TO ENSURE MATERIAL CAN BE RECEIVED INTO DART
- 3- USING PORTABLE HARDNESS TESTER VERIFY HARDNESS OF THE MATERIAL TO THE DRAWING
- 4- VERIFY THAT MATERIAL CERTS MATCH TO WHATS CALLED UP ON THE DART DRAWING

AFTER MATERIAL PASSES INSPECTION

- 5- HAVE DART EMPLOYEES START STOCKING MATERIAL BUT REQUEST MIN **20pcs** FOR FULL INSPECTION
- 6- INSPECT ALL DIMS AS PER DRAWING REQUIREMENTS

INSTRUCTIONS FOR INSPECTING CROSS TUBE MATERIAL

- 1- VERIFY MATERIAL CERTS MATCH THE REQUIREMENTS ON THE DART DRAWINGS
- 2- INSPECT MIN. HALF THE BATCH OF EXTRUSION RECEIVED INTO DART
- 3- INSPECT MATERIAL AS PER THE EXTRUSION REPORT
 - a. WALL THICKNESS USING ULTRA-SONIC IN 4 LOCATIONS
 - b. OUTSIDE DIAMETER HIGHEST/LOWEST BOTH ENDS
 - c. INSIDE DIAMETER HIGHEST/LOWEST BOTH ENDS
 - d. STRAIGHTNESS @ CENTER OVER 12" SPAN
 - e. WALL THICKNESS USING TUBE MICROMETER HIGHEST/LOWEST BOTH ENDS
- 4- IDENTIFY EACH TUBE IN SEQUENCE OF INSPECTING (TUBE 1, TUBE2.....) AND W/O# AND PO#
- 5- RECORD ALL FINDINGS ON EXTRUSION REPORT

IF ANY QUESTIONS PLEASE SEE QC COORDINATOR BEFORE GOING FURTHER